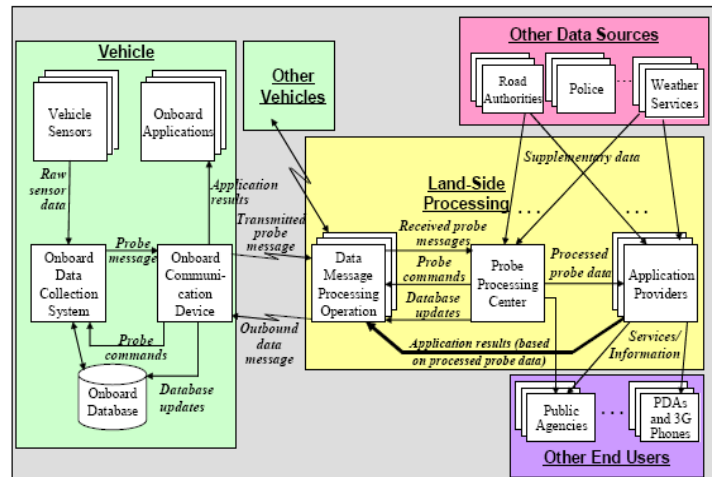


NEWSLETTER JANUARY 2007

TRANSPORTATION RESEARCH QUICK STUDY PROGRAM BOOST

The Transportation Research Quick Study (TRQS) program was created to provide a funding source for small, quick turn-around research tasks. The maximum budget for TRQS projects was recently raised from \$2,500 to \$5,000. Study TRQS-02, *Arizona I-19 WiFi Corridor: Assessment of Opportunities for Probe Data Operation*, evaluated the use of probe vehicle data to monitor traffic and road conditions in a WiFi (wireless broadband) highway corridor (Interstate 19 in southern Arizona). A follow on study, TRQS-03, is currently underway. The study, titled *Proof-of-Concept Demonstration – I-19 WiFi Corridor Probe Vehicle Tracking*, will conduct field tests along I-19 using proprietary technologies for gathering probe data.

TRQS projects are authorized at the discretion of the Arizona Transportation Research Center (ATRC) manager. Proposals may be presented to the ATRC manager for TRQS funding by anyone in ADOT. The primary criteria are that the proposal have a research element and offer a benefit to ADOT.



WiFi Typical Probe Data Processing Data Flows

State Planning and Research (SPR) Projects

SPR-615, ITS CONCEPTS FOR RURAL CORRIDOR OPERATIONS

Based on the results of an earlier ATRC study (SPR-570) this project is evaluating the newest state-of-the-practice concepts for rural applications, considering the field conditions, available communications, and various levels of existing infrastructure. The project is focusing on more complete implementation of the earlier study's recommendations with the newest, best intelligent transportation system (ITS) resources. The research is addressing specific needs for each rural region. ITS Engineers is conducting the study.

SMALL BUDGET RESEARCH PROJECT UPDATE

The ATRC small budget program sets aside \$100,000 each year for research studies with budgets of \$15,000 or less. One new small budget project has been approved and funded during the last quarter: SPR-641, *Overdimensional Vehicle Routing Study*

COMPLETED PROJECTS

Four reports were published during the last quarter.

SPR-371, *Maintenance Cost Effectiveness Study*

Project Manager: Jason Harris

tel: 602-712-6927; email: jharris@azdot.gov

SPR-572, *Evaluation of Benefits and Opportunities for Innovative Noise Barrier Designs*

Project Manager: Tom Kombe

tel: 602-712-3135; email: ekmobe@azdot.gov

SPR-582, *Multi Modal Use of Freeway Corridors*

Project Manager: John Semmens

tel: 602-712-3137; email: jsemmens@azdot.gov

SPR-622, *Arizona Construction Cost Index*

Project Manager: John Semmens

tel: 602-712-3137; email: jsemmens@azdot.gov

The reports are available online at:

http://www.azdot.gov/TPD/ATRC/Publications/project_reports/index.asp

ATRC LIBRARY

ATRC library information, including the library catalogue, is available online at:

<http://www.azdot.gov/TPD/ATRC/library/index.asp>

STAFF ACTIVITIES



John Semmens has been asked to serve on a panel for an upcoming National Cooperative Highway Research Program (NCHRP) Synthesis study on highway cost allocation. John has worked on highway cost allocation studies on several occasions for the Arizona Department of Transportation (ADOT). In the early 1990s he worked with consultants from

Sydec and Cambridge Systematics on ADOT's first highway cost allocation study. After moving to ATRC in 1994, John initiated a research project that resulted in the development of a simplified highway cost allocation model. This model enables in-house Financial Management System staff to generate a cost allocation estimate. The result is more frequent updates at far less cost.

ATRC Staff

Frank Darmiento, M.S.E., P.E. – Manager

PROJECT MANAGERS

Christ Dimitroplos, P.E.

Jason Harris, P.E.

Tom Kombe, Ph.D., P.E.

Steve Owen, P.E.

John Semmens, M.A., MBA

Dale Steele, M.A., M.L.S. – Librarian

Christopher Gass, B.S. – Data Technician

Jeremy Sala – Engineering Assistant



State Route 67 north of the Grand Canyon

Contact:

Frank T. Darmiento, P.E.

Telephone: (602) 712-3134

Fax: (602) 712-3400

fdarmiento@azdot.gov

ARIZONA TRANSPORTATION RESEARCH CENTER
2739 E. Washington St., Mail Drop 075R
Phoenix AZ 85034-1422

<http://www.azdot.gov/tpd/atrc/index.asp>

MISSION: The ATRC mission is to pursue and share knowledge in transportation systems and programs.